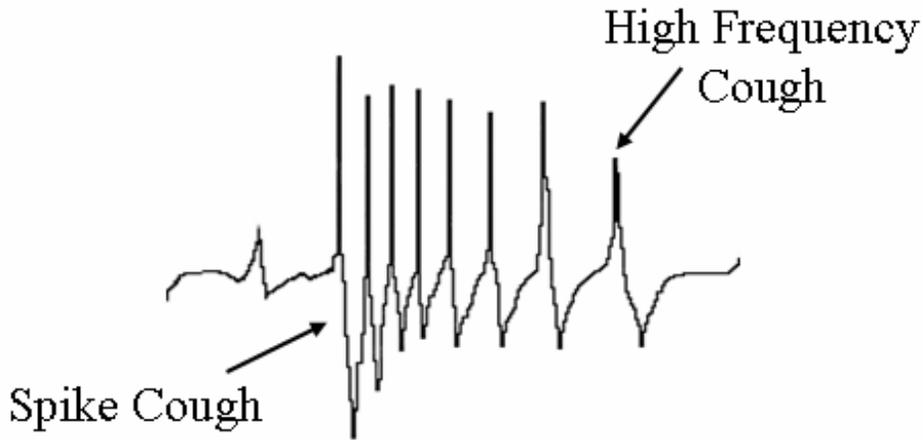
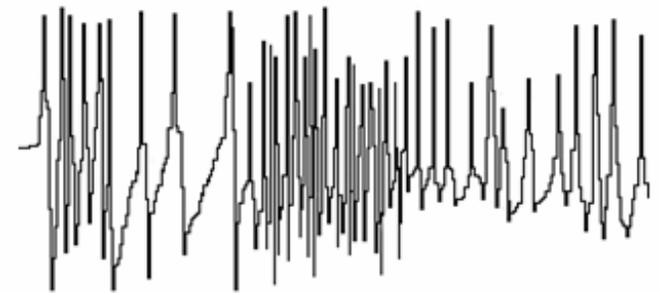


**Ventilatory Frequency**



**Cough Frequency**



**Whole Body Movement**

In the USACEHR aquatic biomonitor, fish behavior is monitored by pairs of electrodes mounted above and below each of eight bluegills. As the fish move in the chamber and ventilate their gills, muscle contractions generate electrical signals in the water that are monitored by a computer. Endpoints include ventilation rate, strength of ventilation, gill purge (cough) rate, and body movement rate.